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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/584,204	06/23/2006	Yuko Kubo	292762US0PCT	9114
22850 7590 08/10/2009 OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314				
EXAMINER GWARTNEY, ELIZABETH A				
ART UNIT 1794		PAPER NUMBER		
NOTIFICATION DATE 08/10/2009		DELIVERY MODE ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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### Office Action Summary

**Application No.**

10/584,204

**Applicant(s)**

KUBO ET AL.

**Examiner**

Elizabeth Gwartney

**Art Unit**

1794

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 13 April 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SF/ICE)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

1. The Amendment filed 04/13/2009 has been entered. Claims 11-20 have been added. Claims 1-20 are pending.
2. The previous specification and claim objections have been withdrawn in light of applicant's amendments made 04/13/2009.

***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:  
  
The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
4. Claims 1-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claims 1 and 3, the recitation "(A) an insoluble substance derived from a vegetable, wherein a content as a dry weight of the insoluble substance is from 0.1 to 1.2 wt%" renders the claim indefinite. It is not clear whether the vegetable drink composition comprises 0.1 to 1.2 wt% of insoluble substance derived from a vegetable or if the insoluble substance comprises 0.1 to 1.2 wt% of some component.

Further, regarding claims 1 and 3, the recitation "wherein the insoluble substance is contained in the vegetable juice and has a size of 833  $\mu$ m or less" renders the claim indefinite because it is not clear what, including the mass of insoluble substance or particles of insoluble substance, has a size of 833  $\mu$ m or less. With regard to the prior art, the term "size" encompasses particle size.

Claims 18-19 recite the limitation "the acidic polysaccharide water-soluble dietary fiber (B)" in lines 1-2. There is insufficient antecedent basis for this limitation in the claims given that claims 18-19 depend from claim 3.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

7. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(e) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

8. Claims 1, 4, 7-12 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hoersten et al. (US 4,988,530) in view of Romeo (WO 2004/017759) .

Regarding claims 1, 4, 7-8 and 11-12, Hoersten et al. disclose a beverage composition comprising from 5- 65% tomato juice, 0.2-1.2% pectin and 1-4% gum arabic (Abstract, C3/L19-60). Hoersten et al. disclose that the amount of juice is in the range of 5 to 65% of the beverage.

While Hoersten et al. disclose tomato juice, the reference does not disclose that the beverage comprises water or, as a dry weight, from 0.1 to 1.2 wt% of an insoluble substance wherein the insoluble substance has a size of 833 um or less.

Romeo teaches a tomato juice composition comprising 5.5-20% dry residue and 94.5-80% water wherein the dry residue includes from 18-70% insoluble solids (Abstract). Romeo also teaches that the insoluble substance has a particle size of 0.5 mm or less (*see* separation liquid solid apparatus reach values not higher than 0.5 mm - p.11/3rd full paragraph). Given Hoersten et al. disclose a beverage comprising 65% tomato juice, since Romeo teaches tomato juice comprising 5.5% dry residue wherein the residue includes from 18-70% insoluble solids, it is clear that the beverage would comprise from 0.64 to 2.5% insoluble solids, i.e. insoluble substance.

Hoersten et al. and Romeo are combinable because they are concerned with the same field of endeavor, namely, tomato juice products. It would have been obvious to one of ordinary skill in the art at the time of the invention to have used a tomato juice comprising from 0.64 to 2.5 % insoluble solids wherein the insoluble solids have a particle size of less than 0.5 mm, as taught by Romeo, as the tomato juice ingredient in the beverage of Hoersten et al., because doing

so would amount to nothing more than a use of a known tomato juice product for its intended use in a known environment to accomplish entirely expected result

Regarding the range of insoluble solids disclosed by the prior art, as set forth in MPEP 2144.05, in the case where the claimed range “overlap or lie inside ranges disclosed by the prior art”, a *prima facie* case of obviousness exists, *In re Wertheim*, 541 F.2d 257, 191 USPQ 90 (CCPA 1976); *In re Woodruff*, 919 F.2d 1575, 16 USPQ2d 1934 (Fed. Cir. 1990).

Regarding claims 9-10, modified Hoersten et al. disclose all of the claim limitations as set forth above. Hoersten et al. also disclose that the beverage is subjected to commercial sterilization temperatures and packaged (C4/L29-35).

Regarding claim 17, modified Hoersten et al. disclose all of the claim limitations as set forth above and that the beverage composition is a fruit or vegetable juice drink (C3/L45-47).

9. Claims 2, 6 and 13-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hoersten et al (US 4,988,530) in view of Romeo (WO 2004/017759) and applied to claim 1 above, and further in view of Wang et al. (US 6,004,610).

Regarding claims 2 and 13, modified Hoersten et al. disclose all of the claim limitations as set forth above. While Hoersten et al. disclose a beverage composition comprising an acidic polysaccharide water-soluble dietary fiber (i.e. Pectin - Abstract), the reference does not explicitly disclose a beverage comprising a neutral polysaccharide water-soluble dietary fiber.

Wang et al. teach a dietary fiber enriched beverage comprising 1.5-10% of a fiber blend that includes hydrolyzed guar gums and arabinogalactan (Abstract). Wang et al. teaches that

hydrolyzed guar gum and arabinogalactan are used because of their low viscosity, lightness in color, and lack of taste (C2/L33-35).

Hoersten et al. and Wang et al. are combinable because they are concerned with the same field of endeavor, namely, soluble dietary fiber containing beverages. It would have been obvious to one of ordinary skill in the art to have added the arabinogalactan and hydrolyzed guar gum blend taught by Wang et al. to the soluble dietary fiber fortified beverage of Hoersten et al. for the purpose of increasing the dietary fiber content of the beverage without increasing viscosity or negatively impacting the color and taste of the beverage product.

Regarding claims 6 and 14, modified Hoersten et al. disclose all of the claim limitations as set forth above. Given that Hoersten et al. disclose a beverage composition comprising 1.2-5.2% of acidic polysaccharide water-soluble dietary fiber, since Wang et al. disclose a beverage composition with 1.5-10% of a neutral polysaccharide water-soluble dietary fiber blend, it is clear that the total content of dietary fiber in the beverage of modified Hoersten et al. would range from 2.7-15.2%.

10. Claims 3, 5 and 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hoersten et al. (US 4,988,530) in view of Romeo (WO 2004/017759) and Wang et al. (US 6,004,610).

Regarding claims 3 and 5, Hoersten et al. disclose a beverage composition comprising from 5- 65% tomato juice, 0.2-1.2% pectin and 1-4% gum arabic (Abstract, C3/L19-60). Hoersten et al. disclose that the amount of juice is in the range of 5 to 65% of the beverage.

While Hoersten et al. disclose tomato juice, the reference does not disclose that the beverage comprises water or, as a dry weight, from 0.1 to 1.2 wt% of an insoluble substance wherein the insoluble substance has a size of 833  $\mu\text{m}$  or less. Further, while Hoersten et al. disclose an acidic polysaccharide water-soluble dietary fiber, the reference does not disclose a beverage composition comprising a neutral polysaccharide water-soluble dietary fiber.

Romeo teaches a tomato juice composition comprising 5.5-20% dry residue and 94.5-80% water wherein the dry residue includes from 18-70% insoluble solids (Abstract). Romeo also teaches that the insoluble substance has a particle size of 0.5 mm or less (*see* separation liquid solid apparatus reach values not higher than 0.5 mm - p.11/3rd full paragraph). Given Hoersten et al. disclose a beverage comprising 65% tomato juice, since Romeo teaches tomato juice comprising 5.5% dry residue wherein the residue includes from 18-70% insoluble solids, it is clear that the beverage would comprise from 0.64 to 2.5% insoluble solids, i.e. insoluble substance.

Hoersten et al. and Romeo are combinable because they are concerned with the same field of endeavor, namely, tomato juice products. It would have been obvious to one of ordinary skill in the art at the time of the invention to have used a tomato juice comprising from 0.64 to 2.5 % insoluble solids wherein the insoluble solids have a particle size of less than 0.5 mm, as taught by Romeo, as the tomato juice ingredient in the beverage of Hoersten et al., because doing so would amount to nothing more than a use of a known tomato juice product for its intended use in a known environment to accomplish entirely expected result

Regarding the range of insoluble solids disclosed by the prior art, as set forth in MPEP 2144.05, in the case where the claimed range "overlap or lie inside ranges disclosed by the prior



art”, a *prima facie* case of obviousness exists, In re Wertheim, 541 F.2d 257, 191 USPQ 90 (CCPA 1976); In re Woodruff, 919 F.2d 1575, 16 USPQ2d 1934 (Fed. Cir. 1990).

Wang et al. teach a dietary fiber enriched beverage comprising 1.5-10% of a fiber blend that includes hydrolyzed guar gums and arabinogalactan (Abstract). Wang et al. teaches that hydrolyzed guar gum and arabinogalactan are used because of their low viscosity, lightness in color, and lack of taste (C2/L33-35).

Hoersten et al. and Wang et al. are combinable because they are concerned with the same field of endeavor, namely, soluble dietary fiber containing beverages. It would have been obvious to one of ordinary skill in the art to have added the arabinogalactan and hydrolyzed guar gum blend taught by Wang et al. to the soluble dietary fiber fortified beverage of Hoersten et al. for the purpose of increasing the dietary fiber content of the beverage without increasing viscosity or negatively impacting the color and taste of the beverage product.

Regarding claims 18-19, modified Hoersten et al. disclose all of the claim limitations as set forth above. Given that an acidic polysaccharide water-soluble dietary fiber (B) is not required in claim 3, the limitations of claims 18-19 have been met.

Regarding claim 20, modified Hoersten et al. disclose all of the claim limitations as set forth above and that the beverage composition is a fruit or vegetable juice drink (C3/L45-47).

11. Claims 15-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hoersten et al. (US 4,988,530) in view of Romeo (WO 2004/017759) and applied to claim 1 above, and further in view of Iwata et al. (US 5,324,526).

Regarding claims 15-16, modified Hoersten et al. disclose all of the claim limitations as set forth above. While Hoersten et al. disclose an acidic polysaccharide water-soluble dietary fiber including pectin (Abstract), the reference does not explicitly disclose alginic acid, depolymerized alginic acid or low-molecular weight pectin.

Iwata et al. teach a beverage comprising 1% to 50% by weight of a water-soluble algin, i.e. alginic acid (Abstract, C2/L64-66, C3/L36-43). Iwata et al. teach that alginic acid functions as a dietary fiber and has beneficial effects on the health including effectively suppressing an abnormal increase in blood glucose and insulin levels caused by excessive intake of carbohydrates and sugars (Abstract, C5/L31-35).

Hoersten et al. and Iwata et al. are combinable because they are concerned with the same field of endeavor, namely soluble fiber containing beverages. It would have been obvious to one of ordinary skill in the art to have used alginic acid, as taught by Iwata et al., for a soluble dietary fiber in the beverage of Hoersten et al. because doing so would amount to nothing more than the use of a known soluble dietary fiber, having beneficial effects on health, for its intended use in a known environment to accomplish entirely expected results.

### ***Response to Arguments***

12. Applicant's arguments with respect to claims 1-20 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

13. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elizabeth Gwartney whose telephone number is (571) 270-3874. The examiner can normally be reached on Monday - Friday; 7:30AM - 3:30PM EST..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Keith Hendricks can be reached on (571) 272-1401. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/E. G./  
Examiner, Art Unit 1794

/KEITH D. HENDRICKS/  
Supervisory Patent Examiner, Art Unit 1794